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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,838	09/23/2003	Michael Chaves	11347	4973

7590 05/02/2007
James M. Stover
NCR Corporation
1700 South Patterson Blvd.
Dayton, OH 45479-0001

EXAMINER

PYO, MONICA M

ART UNIT	PAPER NUMBER
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2161

MAIL DATE	DELIVERY MODE
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05/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/668,838

Applicant(s)

CHAVES ET AL.

Examiner

Monica M. Pyo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/6/2007 has been entered.
2. Claims 8-24 are currently pending in this application. Claims 8, 15 and 21 are independent claims. In the Amendment filed 2/6/2007, claim 8 is amended. Claims 8-24 are rejected.

Drawings

3. The drawing amendment received on 1/5/2007. The changes are acknowledged and therefore, the drawing objections made in a prior Office Action are withdrawn.

Claim Objections

4. The claim amendment received on 2/6/2007. The changes are acknowledged and therefore, the claim objections made in a prior Office Action are withdrawn.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 15-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 15 and 21, these claims appear to be non-statutory because it lacks the necessary physical articles or objects to constitute a machine or a manufacture within the

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meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

([c]omputer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, **a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory.** See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035. Accordingly, it is important to distinguish claims that define descriptive material *per se* from claims that define statutory inventions." See Interim Guidelines page 53.

Claims 16-20 and 22-24 are also rejected for fully incorporating the deficiencies of their respective base claim by dependency.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 8-12, 15-18 and 21 are rejected under 35 U.S.C. 102(e) as being obvious by U.S. Patent No. 7,003,730 issued to Dettinger et al. (hereinafter Dettinger).

Regarding Claims 8, 15 and 21, Dettinger discloses a method for providing a search query, comprising:

- A). providing an Application Programming Interface (API) for receiving a search constraint and a control field identifier, as a graphical user interface receiving search queries with field specifications (Dittinger: col. 4, lns. 23-40; col. 6, lns. 32-57; col. 9, table 1); and**
- B). providing a search generating module interfaced to the API for automatically generating a search query from the search constraint and the control field identifier, wherein the search constraint defines an operand and an operator for the search query being generated and wherein a control field defines a field of a data store from which the search query is to be executed against, and wherein the search query is automatically generated as a new search as an abstract query being generated in response to user input and a plurality of field specifications (Dittinger: col. 6, lns. 14-31; col. 7, lns. 50-col. 8, lns. 5; col. 9, lns. 24-33).**
- C). wherein when the search query is executed records from the data store are returned representing data store records that satisfy the search constraint and have identical values for the control field identifier for each customer identification value, as query to return a firstname and lastname to meet search constraint and a specific name search result (Dettinger: col. 16, lns. 3-29, col. 17, lns. 34-42; col. 18, table III).**

Regarding Claim 9, Dettinger discloses the method further comprising providing a command option within the API to manually execute the search query (Dettinger: col. 17, Ins. 34-42; col. 18, Ins. 2-21).

Regarding Claim 10, Dettinger discloses the method further comprising presenting the records when the command option is selected (Dettinger: col. 17, Ins. 34-65).

Regarding Claim 11, Dettinger discloses the method wherein the providing of the search generating module further includes interfacing the API to the search generating module over a network (Dettinger: col. 4, Ins. 43-52; col. 6, Ins. 13-31).

Regarding Claim 12, Dettinger discloses the method wherein the providing the API further includes interfacing the API to one or more automated applications (Dettinger: col. 5, Ins. 56-col. 6, Ins. 31).

Regarding Claim 16, Brill and Colace disclose the system wherein the search query interface includes a Graphical User Interface (GUI) application for receiving the search constraint and the control field identifier and an Application Programming Interface (API) that interfaces the GUI application to the search generating module (Dettinger: col. 4, Ins. 43-52; col. 6, Ins. 13-31; col. 7, Ins. 50-col. 8, Ins. 5; col. 16, Ins. 3-29, col. 17, Ins. 34-42; col. 18, table III).

Regarding Claim 17, Dettinger discloses the system wherein the search generating module automatically executes the search query and presents the records to the search query interface (Dettinger: col. 4, lns. 23-36 & 43-52; col. 6, lns. 13-31; col. 17, lns. 34-65).

Regarding Claim 18, Brill and Colace disclose the system wherein the search generating module executes the search query and presents the records to the search query interface when instructed to do so by the search query interface (Dettinger: col. 4, lns. 23-36 & 43-52; col. 6, lns. 13-31; col. 17, lns. 34-65).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 13 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dettinger, as applied to claims 8-12, 15-18 and 21 above, in view of U.S. Patent No. 5,948,040 issued to DeLorme et al. (hereinafter DeLorme).

Regarding Claim 13, Dettinger does not explicitly disclose the method further comprising interfacing the records automatically after the search query is executed a marketing campaign module.

However, DeLorme discloses: the method further comprising interfacing the records automatically after the search query is executed a marketing campaign module (DeLorme: col. 31, lns. 16-41; col. 64, lns. 56-col. 65, lns. 13 - as marketing online advertising).

It would have obvious to a person with ordinary skill in the art at the time of invention to modify the teachings of Dettinger with the teachings of DeLorme to utilize the marketing advertisement for travelers with the motivation to enhance the computerized travel reservation information and planning system (DeLorme: col. 1, lns. 29-46).

Regarding Claim 22, Dettinger does not explicitly disclose the system wherein the system is interfaced to a customer segmentation module.

However, DeLorme discloses the system wherein the system is interfaced to a customer segmentation module, as an itinerary of travel information SCHEDULER sub-menu (DeLorme: cols. 9-10, lns. 65-67 & 1-9; col. 33, lns. 30-52).

It would have obvious to a person with ordinary skill in the art at the time of invention to modify the teachings of Dettinger with the teachings of DeLorme to utilize the marketing advertisement for travelers with the motivation to enhance the computerized travel reservation information and planning system (DeLorme: col. 1, lns. 29-46).

Regarding Claim 23, Dettinger and DeLorme disclose the system wherein the system is used to generate a travel customer segmentation population based on a marketing campaign's search constraint representing an instance of the search constraint and wherein the control filed

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identifier is a trip identifier (Dettinger: col. 16, lns. 3-29, col. 17, lns. 34-42; col. 18, table III) and (DeLorme: cols 9-10, lns. 65-67 & 1-9; cols. 64-65, lns. 56-67 & 1-13).

Regarding Claim 24, Dettinger and DeLorme disclose the system wherein the marketing campaign's search constraint includes at least one of a hotel stay constraint, a rental car constraint, a destination constraint, and a layover constraint (Dettinger: col. 4, lns. 23-40; col. 6, lns. 32-57) and (DeLorme: col. 14, lns. 24-35).

11. Claims 14 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dettinger, as applied to claims 8-12, 15-18 and 21 above, in view of U.S. Patent No. 6,334,131 issued to Chakraburti et al. (hereinafter Chakraburti).

Regarding Claims 14 and 19, Dettinger discloses the method further comprising the search constraint (Dettinger: col. 4, lns. 23-40; col. 6, lns. 32-57).

Dettinger does not explicitly disclose: generating hierarchies from portions of the records when the search query is executed, wherein each hierarchy represents an aspect.

However, Chakraburti discloses: generating hierarchies from portions of the records when the search query is executed, wherein each hierarchy represents an aspect (Chakraburti: cols. 9-10; lns. 65-67 & 1-15 - as directing the search to the relevant section).

It would have obvious to a person with ordinary skill in the art at the time of invention to modify the teachings of Dettinger with the teachings of Chakraburti to utilize the hierarchical

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information structures with the motivation to enhance the method to implement ranking frame based hierarchical information structures (Chakraburti: col. 1, lns. 20-42).

Regarding Claim 20, Dettinger and Chakraburti disclose the wherein the hierarchies are linked to fields in the data store and can be activated from the search query interface to present different views of the hierarchies (Dittinger: col. 4, lns. 23-40; col. 6, lns. 32-57) & (Chakraburti: col. 9, lns. 65-col. 10, lns. 15 & 20-33).

Response to Arguments

12. Applicant's arguments, see pages 7-9 of Remarks, filed 2/6/2007, with respect to the rejection(s) under 35 U.S.C. 103(a) have been fully considered and are persuasive.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica M. Pyo whose telephone number is 571-272-8192. The examiner can normally be reached on Mon & Thur 8:00 - 5:00.

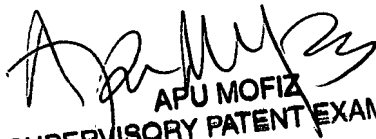
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Monica M Pyo
Examiner
Art Unit 2161

mpyo
4/26/2007


APU MOFIZ
SUPERVISORY PATENT EXAMINER